

Figure 3

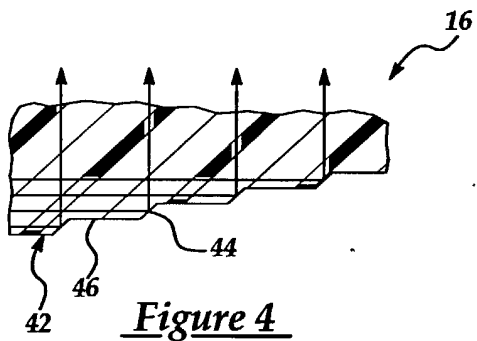


Figure 4

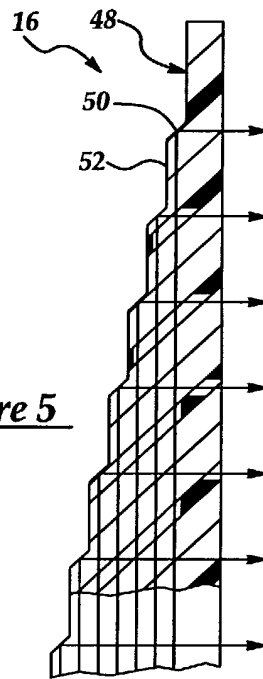


Figure 5

Figure 1 is a semi-logarithmic plot showing the voltage V_R (Y-axis, logarithmic scale from $1e-4$ to $1e-0$) versus Time (ns) (X-axis, linear scale from 0 to 2000). The plot displays a decaying voltage signal with a sharp peak labeled "Object Detected" at approximately 1000 ns. A threshold line labeled $V_{THRESH1}$ is shown as a smooth curve. A point on the signal is labeled "74".

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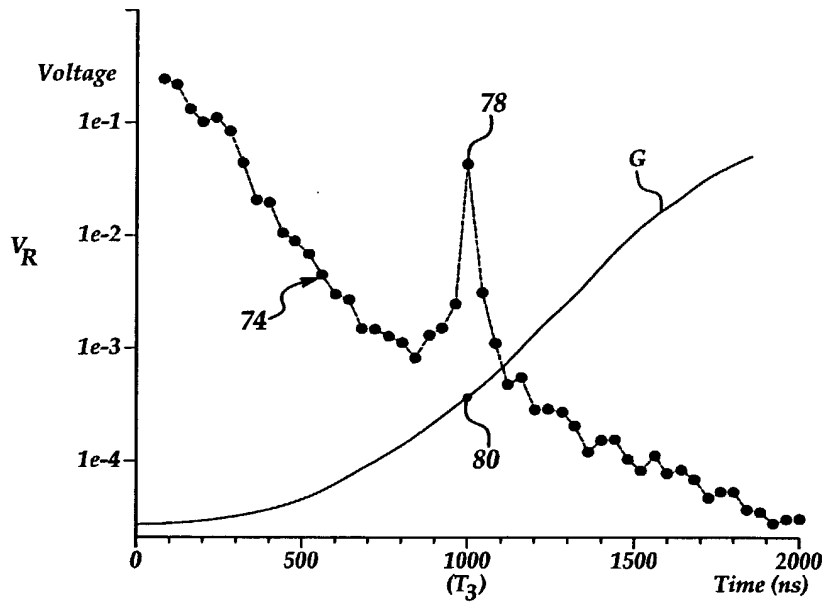


Figure 8

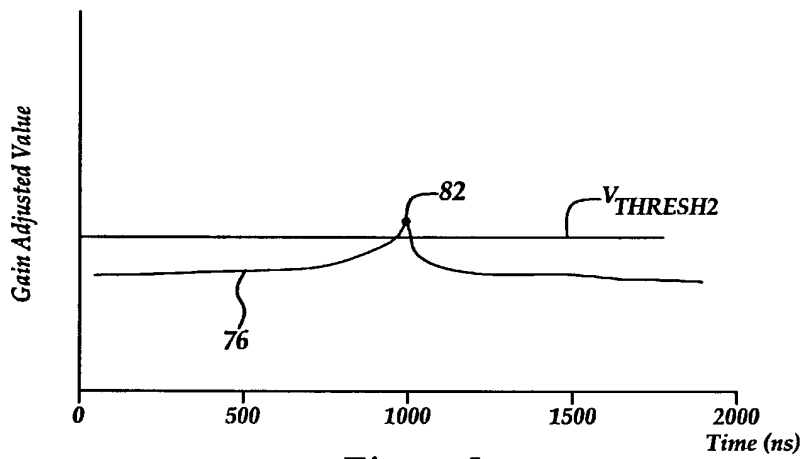


Figure 9


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graph TD
    54[EMIT A LIGHT PULSE] --> 56[RECEIVE A REFLECTION OF THE LIGHT PULSE]
    56 --> 58[INDICATE A PRESENCE OF AN OBJECT FROM THE RECEIVED LIGHT PULSE]
    58 --> 60[ADJUST SENSITIVITY OF THE INDICATING STEP BASED ON AN ELAPSED TIME FROM THE EMISSION]

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graph TD
    62[EMIT A PLURALITY OF LIGHT PULSES] --> 64[RECEIVE A REFLECTION OF THE LIGHT PULSES]
    64 --> 66[INDICATE A PRESENCE OF AN OBJECT FROM THE RECEIVED LIGHT PULSES]
    66 --> 68[ADJUST SENSITIVITY OF THE INDICATING STEP BASED ON A TRAVEL TIME OF THE PULSES]
  
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